

# Hands-On Session

## Workflow for this Hands-On Session

1. Write Python code to solve the programming questions
2. All the questions are based on what we have already discussed.
3. Solutions to all the questions are available in the Day3\_Solutions\_1.ipynb Jupyter notebook
4. It is highly encouraged to solve the programming questionnaires on your own even though you can refer to the solutions

**Q1. Use the get method to print the value of the "model" key of the car dictionary.**

```
car = { "brand": "Ford", "model": "Mustang", "year": 1964 } print(__)
```

In [ ]:

**Q2. Write a python code to loop through any given dictionary.**

In [ ]:

**Q3. Write a Python script to generate and print a dictionary that contains a number (between 1 and n) in the form (x, x\*x)**

In [ ]:

**Q4. Create a dictionary by extracting the key values from a given dictionary. The given dictionary is sample\_dict{"name": "Kelly", "age": 25, "salary": 8000, "city": "New york"} and extract the name and salary from the given dictionary.**

In [ ]:

**Q5. Write a Python script to store book id, book name and price of three books and store the data in dictionary named "dict"**

In [ ]:

**Q6. Write a Python script to generate a Dictionary that contains cities located in India and their corresponding population. Calculate the sum of the population and the average population Delhi --**

8550405, Bangalore -- 3971883, Chennai -- 2731571, Hyderabad -- 2720546, Jaipur -- 2296224, Udaipur -- 1704694

In [ ]:

**Q7. Given a dictionary, append another dictionary at beginning of it. Append the {'pre1': 4, 'Gfg': 5} to the beginning of the test\_dict={"Gfg":5, "is":3, "best":10}**

In [ ]:

**Q8. Write a Python program to filter the height and width of students, which are stored in a dictionary. {'Omkar': (6.2, 70), 'Sohan': (5.9, 65), 'Yatin': (6.0, 68), 'Yash': (5.8, 66)} Height > 6ft and Weight> 70kg: {'Omkar': (6.2, 70)} .**

In [1]:

**Q9. Write a Python program to remove a specified dictionary from a given list. [{'id': '#FF0000', 'color': 'Red'}, {'id': '#800000', 'color': 'Maroon'}, {'id': '#FFFF00', 'color': 'Yellow'}, {'id': '#808000', 'color': 'Olive'}] Remove id #FF0000 from the said list of dictionary: [{'id': '#800000', 'color': 'Maroon'}, {'id': '#FFFF00', 'color': 'Yellow'}, {'id': '#808000', 'color': 'Olive'}]**

In [ ]:

### Sample programs on Tuples

**Q10. Create a tuple that can have any number of items and having different types (integer, float, list, string, etc.).**

In [ ]:

**Q11. Write a python program to concatenate two tuples**

In [ ]:

**Q12. Write a Python program to get the 4th element and 4th element from last of a tuple**

In [ ]:

**Q13. Write a Python program to reverse the contents of a tuple.**

In [ ]:

**Q14. Write a Python program to test if a variable is a list or tuple or a set.**

In [ ]:

**Q15. Write a python program to create a nested tuple to store roll number, name and marks of students**

In [ ]:

**Q16. Write a program to input n numbers from the user. Store these numbers in a tuple. Print the maximum and minimum number from this tuple.**

In [ ]:

**Q17. Write the Python program to sort the elements of the given tuple**

In [ ]:

### **Python File Handling Programs**

**Q18. Write a Python program to create a text file “intro.txt” in python and ask the user to write a single line of text by user input.**

In [ ]:

**Q19. Write a python program to create a text file “MyFile.txt” in python and ask the user to write separate 3 lines with three input statements from the user.**

In [ ]:

**Q20. Write a python program to read the contents of both the files created in the above programs and merge the contents into “merge.txt”. Avoid using the close() function to close the files.**

In [ ]:

**Q21. Write a python program to count the total number of upper case, lower case, and digits used in the text file “merge.txt”.**

In [ ]:

**Q22. Write a python program to count a total number of lines and count the total number of lines starting with ‘A’, ‘B’, and ‘C’. (Consider the merge.txt file)**

In [ ]:

**Q23. write a python program to find the total occurrences of a specific word from a text file:**

In [ ]:

**Q24. Write a python program to read first n no. letters from a text file, read the first line, read a specific line from a text file.**

In [ ]:

**Q25. Write a python program to replace all spaces from text file with a – (dash).**

In [ ]:

**Q26. Write a program to know the cursor position and print the text according to below-given specifications: 1.Print the initial position 2.Move the cursor to 4th position 3.Display next 5 characters 4.Move the cursor to the next 10 characters 5.Print the current cursor position 6.Print next 10 characters from the current cursor position.**

In [ ]:

**Q27. Write a python program to append the contents in entered by the user in the text file:**

In [ ]:

**Q28. Write a python program to read the contents of file in reverse order**

In [ ]:

**Q29. Write a python program to replace multiple spaces with single space in a text file.**

In [ ]: